



And WEATHER AND CROP JOURNAL.

NINETEENTH YEAR, No. 11.

MILWAUKEE, NOVEMBER, 1894.

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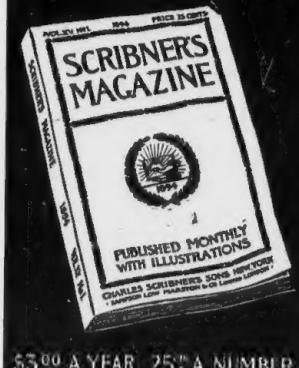
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GRAIN TRADE AND CROPS.

In view of the widespread interest in the question of wheat feeding and its probable extent, the Price Current has instituted an inquiry, and although the returns at this time are not complete, they afford a very good basis for a preliminary estimate and justify some enlargement in the previous general approximations of this paper. The eight Western states of Ohio, Michigan, Kentucky, Indiana, Illinois, Iowa, Missouri and Kansas produced approximately one-half of the entire wheat crop of the country, and these states represent nearly all the wheat-feeding area having any significance in the calculations.

In the feature of percentage of absorption of this grain by animals Iowa probably stands highest, but the production of that state was relatively small. Very considerable quantities of wheat are being received in Iowa from other states for feeding purposes. Next in order are Kansas, Ohio, Indiana, Illinois, Michigan, Missouri and Kentucky. These returns suggest that the feeding consumption has reached approximately 40,000,000 bushels already, and in most of the sections a continuance is expected until prices advance so as to modify the inducement for such disposition of the grain. Without an early change in this particular the estimates for the season suggest approximately 75,000,000 bushels, or about as much more to be fed as has been thus disposed of. Some localities, however, are reducing wheat feeding operations under the availability now of corn and other feeding material. It seems justifiable to say that the indications now are that from 60,000,000 to 75,000,000 bushels of wheat will be absorbed by animals from the crop of 1894.

If the wheat crop be recognized as approximately 500,000,000 bushels and the home requirements for bread and seed be estimated at 375,000,000, or 75 per cent of the production, and 75,000,000 bushels, or 15 per cent, be disposed of in feeding operations, there would remain but 50,000,000 bushels, exclusive of the surplus of previous production, available for exportation. If the marketable portion of this surplus be accepted as 60,000,000 bushels, as previously suggested, the total exportable quantity on this basis would be 110,000,000 bushels, of which one-half or 55,000,000, has already been exported. These conclusions are based on the presumption that the bread consumption rate of former years is being maintained.

The situation in wheat in this country is truly anomalous. The warehouse stocks in sight are out of all usual proportion to the marketable quantity in the country, and these stocks are more potential in market influence than any other features in the question. But if the general propositions herein presented are not radically at fault there will ere long be an important change, for the interior mills, already finding difficulty in securing milling supplies, must necessarily look to the large centers, under which shaping of conditions the growing tendency of visible stocks will give way to unexpected decrease. Again, if the propositions are not faulty, this country long before the close of the year will cease to have its wheat markets gauged by the temper of foreign merchants, accustomed to the acceptance of extravagant statistical exhibits with reference to the world's crops.

IN THE ORIENT.

Concerning the situation in Europe and the Far East the London Mark Lane Express remarks: "The sowing of wheat in England, where it is proceeding at all, is proceeding satisfactorily. In France almost two-thirds of the crop is said to be already in the ground and the seed bed is excellent. French farmers are discontented with prices, but they are not likely to reduce the wheat area in a time of unsettled politics. Russian farmers are equally unlikely to give up wheat growing, and the area under wheat in Central Europe remains remarkably stationary from year to year. Switzerland and Greece are increasing their wheat area, but the former can never be self-supporting, and the latter has for the most part a barley soil. The same is the case over a large area of Spain. In Turkey, Servia, Bulgaria and Roumania the wheat area can be greatly extended if low prices promote the idea among farmers. In Asia Minor the new roads are opening up new avenues of agricultural commerce, but the Turkish government is very poor, and credit has been not so much exhausted as alienated by acts of a nature bordering on repudiation. Asia Minor, under a Western power, may become at any time an important trade factor; the markets of England, France and the Low Countries are already familiar with the cereals produced in small sections of Asia Minor annexed by Russia after the last two wars in that region. The soil and climate are both of the best."

THE UTAH COMBINE.

The Inter-Mountain Milling Co. has been in existence three months. In that short time its general managers say it has more than fulfilled the expectations with which it was formed. It turns out every month 1,000 more barrels of flour than the six mills which it absorbed were able to manufacture. And it has reduced the price of flour 60 cents per barrel. The fear that it was formed for the purpose of robbing or imposing upon the people seems, therefore, to have been unfounded.

The combine was effected after great difficulty, for the purpose, primarily, of lessening the cost of production and facilitating distribution. The articles of incorporation were filed August 1. Seven days later, namely, August 8, four of the mills, which were run by water power, were started up under the new auspices. Two shifts of men were set at work to run the mills night and day, where formerly no mill had been able to run more than eight to ten hours in the twenty-four hours. In a very short time the four mills combined were turning out over 250 barrels of flour and offal per day, an increase of 13 per cent. over the total output of the six mills running individually. The force of employees was largely reduced, and one office and one corps of clerks made to do the work of six offices under former conditions. One solicitor was found to be sufficient, and a smaller number of draymen was employed. The total expenses were thus reduced from 15 to 20 per cent.

For reasons which concern the syndicate alone, the new combine did not choose to take advantage of all the decreased cost of production for themselves, but applied it to a reduction in the price of flour. As stated above the full reduction effected has been 60 cents a barrel on flour and 70 cents on flour and offal. The present prices to the trade are: High patent flour, \$1.75 per 100 pounds; straight grade, \$1.50 per hundredweight; family grade, \$1.35; bran, 65 cents; shorts, 75 cents. About one-half of the reduction has been caused by the fall in the price of wheat, but the further 30 cents reduction has been effected entirely by the agency of the syndicate. The saving made for the public at large will, therefore, figure up to \$5,625 per month, or \$67,500 a year.

The two mills which are not being operated, namely, the Salt Lake Mill & Elevator Company and the Pioneer Mill, are being made to serve as ad-

juncts in the form of warehouses. The Pioneer mill, which is within the city limits, is being used as a storehouse for immediate delivery orders.—Tribune, Salt Lake City, Utah.

THE FIRE PAIL.

Doubtless many mill-owners have been surprised at the emphasis which insurance inspectors, and the mutual companies in particular, place upon the water pail and water barrel in the mill as a means of extinguishing fire. Sprinklers and standpipes, "independent sources of supply" and all that are well enough; but the insurance man insists on the fire pail and barrel of water. He certainly will not discourage any effort to provide means for fighting incipient fires; but no amount of apparatus can wean him from his first love—the handy bucket. This is not at all surprising in the light of facts. More incipient mill fires are put out by means of the fire pail than all other agencies combined. Any other apparatus is liable to fail at the crucial time. But the fire pail is always ready, and anybody, even a boy, can use it effectively. This is the sole and simple reason of the insurance man's devotion to the bucket and barrel. He knows from experience that they are effectual.—Woodworker.

A CORNER IN ELK TEETH.

John D. Losekamp, of Billings, Mont., is said to hold the elk-tooth stock of the entire country, by Forest and Stream, and to his supply he is constantly adding. Indians and hunters bringing teeth to him from all over the country. "Not everyone knows that the elk teeth, or rather the tusks, of which only two are found in the mouth of the adult elk, have a practical commercial value. The teeth are used as jewelry, most as pendants on watch guards or as insignia of the secret society known as the Elks. The value of a tooth ranges from 50 cents to \$2.50, according to its size, color and marking. Mr. Losekamp has now over 80,000 elk teeth deposited in safety vaults. Many of the old Indian dresses were highly ornamented with elk teeth, some of them being fairly covered with the teeth."

THE BIG BULL.

Ed. B. Berber recently received the following from C. A. Pillsbury in New York: "Your telegram received with joy. I now expect higher prices for wheat, flour and everything else. Everybody now wants to get on to the bull side of everything."

News Notes.

The statistician of the United States Department of Agriculture stated November 8, that owing to the comparatively small number of returns as yet received in answer to the special circular in regard to feeding wheat to stock the Department will not make a statement as to the same on the tenth nor until more extensive returns are received.

The total receipts at the four principal spring wheat points since August 1, the beginning of the crop year, foot up—Minneapolis, 23,399,840 bushels; Duluth, 16,436,409 bushels; Chicago, 16,436,409 bushels and Milwaukee 2,851,608.

On account of the ruinously low prices for wheat, reports from all countries seem to indicate a smaller area to be devoted to this crop than last year. The autumn sowing so far shows a very good condition in nearly all countries, but it is evident that the smaller acreage will have a tendency to decrease production considerably, unless the progress of growth be particularly favorable.

The Modern Miller: The movement of winter wheat continues a source of keen disappointment to grain merchants, and also is proving more of a cause of anxiety on the part of millers. Receipts fall below the requirements of millers in the Southwest to such an extent that isolated cases are being reported of all wheat shipped from accumulative points to the interior for grinding purposes. The recent advance in wheat this week may stimulate the movement, but this view is open to question.

The flour mills of the Portland Milling and Distilling Company, located at Grants, Ore., don't think times so very hard; 400 barrels behind orders.

Articles of incorporation were filed in Portland, Ore., last Saturday by the Washburn Milling Company. The incorporators being C. W. Washburn, B. A. Washburn and E. M. Cousins; capital stock, \$5,000; objects, to purchase and sell grain, etc., to erect and maintain a steam flour mill.

Charles T. Fox, secretary and treasurer of the Northwestern Consolidated Milling Company; Charles J. Martin, secretary and treasurer of the Washburn-Crosby Milling Company, and H. J. Little, salesman of the Pillsbury-Washburn Milling Company, were interviewed last week in regard to the project of curtailing the output of the flouring mills in Minneapolis. They concurred in saying that there is nothing more at present to be said than has appeared in the papers; that there has been no definite decision or concerted action among the millers of Minneapolis, and that, in their opinion, trade and the conditions of the individual mills will determine their action. Messrs. Fox and Little further said that the usual diminution of the output caused by the closing of river navigation and the consequent higher freight rates will equal or exceed the proposed diminution. They do not believe their mills will be apt to enter into any agreement fixing the output, but the course taken will depend upon the circumstances of the several mills. They admit an overproduction at pres-

ent, but do not know whether any concerted action on the part of Minneapolis millers is probable. They see no need of it, however.

The Northern Pacific Railroad has completed arrangements with the Tacoma Land Company for the latter to build a 2,000,000 bushel wheat warehouse, 750 by 200 feet, two stories high, to be completed at the commencement of next season's grain shipment. The warehouse will increase the storage capacity of elevators at Tacoma to 5,000,000 bushels.

Application was recently made to the Supreme Court by the directors of the Geo. V. Hecker Company, flour miller, for a voluntary dissolution of the company, it having accomplished the purpose for which it was organized, and John M. Gitterman was appointed referee in the matter. It has no creditors. It was incorporated on May 1, 1890, with a capital stock of \$1,500,000, as a successor to the flour business carried on by the late Geo. V. Hecker. It was provided in his will that the business should be closed up in three years, but it was found impossible to do this without sacrificing the assets, and all the heirs agreed to have the business carried on by a stock company, which was done. Later on the business, it is stated, was sold for \$1,500,000 and the amount was distributed among the stockholders after paying the outstanding claims of the company.

The N. P. Elevator system was bought by E. W. Peet, of St. Paul, for \$250,000. The system will be incorporated into the Consolidated Elevator Company, and will include all terminal elevators at Duluth, besides plants in Minnesota and North Dakota.

A recent telegram from Fairchild, Wis., says: The N. C. Foster Lumber Company of this place, which owns one of the largest buckwheat flour mills in Wisconsin, has been paying 80 cents per bushel for buckwheat up to November 1. On that date they received a telegram from a Canadian firm, saying that owing to the new tariff law they were able to deliver buckwheat at Fairchild for 60 cents per bushel. They ordered five car-loads, which are now on the way, and if it is satisfactory they intend ordering twenty thousand bushels. They also have prices from the same Canadian firm on hay below what they can buy it for at home. This is a good illustration of how the new tariff law helps the farmer.

E. P. Rhodes, miller at Bridgeport, O., who recently made an assignment to H. G. Branam, is reported to have liabilities of \$30,000; nominal assets, \$35,000; actual assets estimated at \$12,000.

The leading miller of Russia is dead. He was the late Czar. The deceased ruler took a direct interest in Russian milling and all its cognate interests.

Says a cablegram of last week: "The stock of foreign wheat in the United Kingdom and Continent is placed at about 20,000,000 bushels less than a year ago, but this is more than offset by excess of French crop." It should be added that the new French wheat is in very bad condition, the wet harvest having stained and sprouted much of it. The French millers ex-

pect to import quite a quantity of dry and sound wheat, in spite of the excess of their crop over home needs. It would seem, therefore, that the French surplus is hardly as important as the cablegram quoted makes it appear.—Milling World.

According to the latest estimates, Russia will export 140,000,000 bushels of wheat on this crop. Former estimates ranged as high as 200,000,000 bushels. The end will probably show about 120,000,000 bushels exported. The bulk now coming out is very inferior grain.

Wood Lake, Minn., wants a flour mill.

NEW MILLS.

—S. Heath, Tidal, Pa., builds a mill.
—Baker City, Ore., will bonus a mill.
—Mosca, Col., men build a 300-barrel mill.

—G. T. Metzgor, Waterville, O., builds a mill.

—Wilkesbarre, Pa., men are building a mill.

—J. H. Green, Cottonwood, Minn., plans a mill.

—McDaniel Bros., Dickson, Tenn., build a mill.

—The Elkin, N. C., Milling Co., plan a new mill.

—L. W. Fausler, Pender, Neb., builds a feed-mill.

—H. M. Lloyd, Sterling, Kan., builds a feed-mill.

—J. H. Poston, Eufaula, Ala., builds a grist-mill.

—H. Elchler, mill, Camp Douglass, Wis., sold out.

—Long & Carver, Roxboro, N. C., built a corn-mill.

—N. F. Bowers, Shiloh, Md., builds a 25-barrel mill.

—E. Bucher, Logansport, Ind., builds a \$12,000 mill.

—The Dunlap, Ia., Milling Co. rebuild burned mill.

—H. Peilert, Belleville, Mich., builds a 75-barrel mill.

—The Belleville, Kas., Milling Co., build a corn-mill.

—T. S. B. Freidinger, Manchester, Md., builds a mill.

—Wm. Kirk, Parkersburg, W. Va., starts a grist-mill.

—F. Bohnert, Longtown, Mo., builds a 50-barrel mill.

—The Florida, O., Milling Co., builds a 100-barrel mill.

—N. Martin, Marshall, Wash., builds a 100-barrel mill.

—The Stoughton, Wis., Mill Co. build a 100-barrel mill.

—E. Walker & Co., Bosworth, Mo., rebuild burned mill.

—Compton & Jenkins, millers, Elkhart, Ind., dissolved.

—Kubash & Baum, Olivia, Minn., built a 90-barrel mill.

—Brainard, Neb., men subscribed \$5,000 to build a mill.

—H. Sproull & Co., Boyers, Pa., build a buckwheat mill.

—Carnes Bros., Two Rivers, Minn., build a 50-barrel mill.

—Miller & Neller, Eagle Lake, Minn., rebuild burned mill.

—Cotter & Morton, Spencerville, O., build a 60-barrel mill.

—F. Neiderhauser, Linn Grove, Ind., built a 50-barrel mill.

—The Stoughton, Wis., Milling Co. build a 100-barrel mill.

—W. H. Armstrong, Waycross, Ga., built an 18-barrel mill.

—Roth Bros. & Hedwig, Kuhn, N. D., build a 75-barrel mill.

—A. J. Dougherty, Mound City, Ill., builds a 150-barrel mill.

—Schultz, Baujau & Co., Beardstown, Ill., remodel their mill.

—G. W. Metler & Son, Flat Rock, Mich., built a 75-barrel mill.

—H. D. Smith, Smith, Sioux Rapids, Ia., builds a 50-barrel mill.

—D. L. Foster and S. L. Wright, Paris Crossing, Ind., build a mill.

—The V. W. Darwin Mill Co., Durand, Wis., build a 60-barrel mill.

—J. W. Wilson, Escondido, Cal., built and started a 75-barrel \$10,000 mill.

—The Underwood Milling Co., Northville, S. D., started their new mill.

DULUTH vs. LIVERPOOL.

The following statement showing the price of No. 1 hard wheat in Duluth, October 3, 1894, compared with the actual sale of 4,000 bushels of the same, made in Liverpool on the same day, for London delivery, cost, freight and insurance, is furnished by the Minnesota railroad and warehouse commission:

October 3.	Cents.
Price No. 1 hard in Duluth,	57.75
Duluth elevator charges, weighing and inspection	00.85
Lake freight and insurance, Duluth to Buffalo	08.50
Buffalo elevator charges and commission	01.00
Canal freight and insurance, Buffalo to New York	03.00
New York elevator charges, weighing, transferring, demurrage, towing, trimming, etc.	01.50
Ocean freight and insurance, New York to London	2.25
Loss in weight, Duluth to London	00.50
Cost in London, c. i. f.	70.35

October 3.

Loss in transaction	02.35
Or a little over 2½ cents per bushel.	
October 6 1,000 quarters of 8,000 bushels, for London delivery at 22 shillings 6 pence per quarter, or 67½ cents per bushel	67.50
Loss in transaction	02.35
Or a little over 2½ cents per bushel.	
October 6 1,000 quarters of 8,000 bushels sold upon same terms and same price; 10,000 quarters, about 80,000 bushels, No. 1 California, sold same day at 65½ cents, c. i. f., in Liverpool.	

ANCHOR ICE.

In fixing up gate racks for winter, and making provisions for anchor ice, it is hard to believe that this sort of frozen material will form and make itself fast to every object far below the surface, when, if it is cut loose, it will rise to the surface like any other light substance and float off on the water. The philosophy of this whole proceeding lies in the fact that when water is perfectly still, or moving as in one body, it can be cooled down below the point where ice is formed in just the same way that it can be heated above the boiling point a trifle when care is taken not to cause the water to circulate; then, when the moving mass comes in contact with any object, whether it be below the surface or not, a slight disturbance takes place among the particles of water, causing a portion to turn into ice and making it fast to the object.—Journal of Commerce.

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* Members of Executive Committee.

FLOUR AND BREAD.

A Statement Throwing Light on the Cost of a Loaf.

A statement made by one who has served many years in the army as a commissary sergeant furnishes some interesting facts pertinent to the bread question, says the Washington Star.

"During my term of service in the army I have been from Pembina to the Gulf, and wherever I have been I have found bakers glad to take a barrel of flour from us and furnish bread as an equivalent, pound for pound, we receiving 196 pounds of bread for a barrel of flour. The increase with water, yeast and potatoes (and good flour needs nothing else to make good bread) is computed at 33 1-3 per cent. The Washington bakers decline to use potatoes, as a rule, as it makes too much work; but it improves the bread and keeps it moist. In the army the company to which I belonged was stationed for about a year at Libby Prison, Richmond, Va., and during that entire period John Bagnall, a well-known baker of that city, furnished bread for the company, receiving no other compensation than the 33 1-3 per cent mentioned; and it is from that source and on that computation that the various forts and garrisons of the United States are enabled to keep up a post fund with which to meet contingencies for which Congress makes no appropriation.

"So far as my experience has gone—and I have had a large one—there is not a city of the size of Washington in the United States furnished with poorer bread. * * * Less than five bushels of wheat will make a barrel of clear flour and pay for the milling. But bakers do not use clear flour; they use what is left of the wheat after the patent process flour (starch) has been extracted from it, because, having more gluten in it, it absorbs more water and gives a larger percentage of bread to a barrel of flour. Wheat was selling at Baltimore on Saturday at 54% cents and 54% cents. These figures will show that flour such as bakers use can be made, barreled and laid down in Washington at \$2.75 per barrel, and which the Washington bakers sell in the shape of bread for over \$18. You will clearly see the rapacity of these men, when, as I have shown, other bakers all over the country have been not only willing, but

anxious to furnish bread for the profit of 33 1-3 per cent. on the barrel of flour. I forgot to mention, too, that in purchasing a barrel of flour the purchaser has a barrel worth 25 cents, which brings the price of bakers' flour down to \$2.50, which, I do not doubt, is exactly what they pay for it. You may also have observed that the Bakers' Association purchases flour for all the association, and that it is furnished according to the needs of the members. By this means all are forced to use the same quality of flour, let it be good or bad, and the next time you get bad bread, poor bread, examine some other baker's product, and the chances are that the quality will be the same. This will indicate that the flour is bad."

TRADE MARKS.

No. 25,286—Norton & Co., Chicago, Ill. Wheat-Flour. Picture of the Brownies climbing over a flour barrel. Used since August 9, 1894.

No. 25,325—Noel Mill Company, Estill Springs, Tenn. Wheat-Flour. The word "Undine." Used since August 3, 1893.

No. 25,326—F. Acker & Co., Philadelphia, Pa. Certain named Cereals, Flours, etc. The word "Hygeia." Used since July 1, 1884.

No. 25,365—S. S. Drybread, Taylorsville, Ind. Wheat-Flour. The words "Silver Moon" and picture of a quarter-moon surrounded by stars and clouds. Used since August, 1891.

No. 25,366—Norton & Co., Chicago, Ill. Wheat-Flour. The words "White Seal." Used since July 1, 1894.

No. 25,367—Washburn Crosby Co., Minneapolis, Minn. The words "Bread Winner." Used since November 22, 1893.

WHEAT CULTURE PROSPECTS.

The indications are that no great change will be inaugurated in wheat culture in the United States in the ensuing crop year. There may possibly be a moderate reduction in the area in the autumn-sown portion of the crop, but a radical decrease is not to be looked for in the returns, and the spring sowing, especially if the markets show encouraging signs of improvement in values, may be enlarged sufficiently to balance any deficiency in winter area.—Price Current.

BOOKS AND MAGAZINES.

Henry Loomis Nelson contributes to the November Harper's a delightful article, entitled "At the Capital of the Young Republic," in which he offers glimpses of official life at Washington at the beginning of the century, investing with all the charm of witty and vivid narration a period of real interest. The initial article in the same number has also an American theme and treats of by-gone days—the days when sea-robbers of New York carried on what they termed the Red Sea Trade, regarding it as a business rather than as a crime, and "agreeable and companionable pirates" (in a town that may still, unfortunately, count among its officials "agreeable and companionable" persons who regard robbery as a business rather than as a crime) are described by Thomas A. Janvier.

The fiction of the November Century includes the first part of a new novel by Mr. Marlon Crawford, entitled "Casa Braccio," which is illustrated by Mr. Castaigne. The scene of this story is laid in Italy and the opening chapters at Subiaco, a town to the southeast of Rome, and one of the leading characters is a nun, a princess of the House of Braccio, who has taken up the conventional life against her will. The story gives promise of being remarkable among Mr. Crawford's work for its dramatic action. The same number contains the conclusion of Mrs. Burton Harrison's novelette of contemporaneous New York, "A Bachelor Maid," illustrated by Wiles, and three short stories: "Josselin," by Anna Eichberg Kling, illustrated by Stern; "McGraw," by Francis Lynde, with pictures by Kemble, and "A Haliloween Reformation," by Hezekiah Butterworth, illustrated by Wiles. Among the poets of the number are Edith Thomas, Elizabeth Akers, W. P. Foster, John H. Boner, John Vance Cheney, Charlotte Fiske Bates and Jennie E. T. Dow. "In Lighter Vein" contains a sketch of a second wife entitled "Successor to a Paragon," by Miss S. Elger Benet.

In "The Progress of the World," the editorial department of the Review of Reviews for November, the political campaigns now "on" in the different states naturally receive extended comment, which is supplemented in the "Record of Current Events" by notes on the issues presented and the nature of the contests to be decided on November 6 in the various sections of the Union, together with a full list of the gubernatorial candidates put in nomination by the four great political parties of the country.

Prof. N. S. Shaler's article on "The Horse," another of his popular papers on Domesticated Animals, tells in an untechnical and thoroughly interesting way of the development of this fine animal, whose many admirable qualities have contributed so much to man's advancement in civilization. The distinguished French painter Delort has made a series of striking pictures to accompany the text.

The complete novel in the November issue of Lippincott's is "Dora's Defiance," by Lady Lindsay, an author who has made her mark in England, though little known as yet in this coun-

try. It is a brightly told story of a very peculiar young lady who could find no interest in life till it came too late to be taken in the conventional way.

"An Arizona Speculation," by Mary E. Stickney, has the full Western flavor, and depicts a character evidently drawn from life. Ella Higginson narrates briefly but forcibly a tragical episode, "In the Bitter Root Mountains." In "Rector Warne's Heresy," Gillam W. Ford shows how duty came to the front and drove doctrine into the background. Virginia Woodward Cloud brings to life "The Man Who Died at Amherst," and gives him something to live for. "The Roses," of which Fannie E. Newberry tells, were sent to the wrong lady, with curious results.

OCTOBER MILLING PATENTS.

The following list of patents for Milling and Grain Handling Appliances granted during October, 1894, is specially reported for the United States Miller by H. G. Underwood, Patent Attorney, No. 107 Wisconsin Street, Milwaukee, Wis., who will send a copy of any patent named to any address for 25 cents:

527,341—Dust Collector, R. McWilliams, West Newton, Pa.

527,442—Grain Heater or Steamer, J. P. McCallister, Avoca, Wis.

527,910—Return-Air Purifier, J. Washington, Indianapolis, Ind.

527,800—Centrifugal Separator, H. F. M. Kayser, Leipsic, Germany.

527,935—Dust-Collector, A. C. Brantingham, Toledo, Ohio.

527,936—Dust Collector, A. C. Brantingham, Toledo, Ohio.

527,937—Dust Collector, A. C. Brantingham, Toledo, Ohio.

527,939, Dust Collector, A. C. Brantingham, Toledo, Ohio.

527,940—Dust Collector, A. C. Brantingham, Toledo, Ohio.

528,070—Feed-mill, N. P. Bowsher, South Bend, Ind.

527,835—Purifier, Separator and Grader, D. J. Davidson, Port Huron, Mich.

528,037—Roller-mill Feed Device, J. Seiberth, Frankermuth, Mich.

527,882—Cut-off Sieve, W. A. Pendry, Port Huron, Mich.

527,834—Agitable Sieve Cut-off, D. J. Davidson, Port Huron, Mich.

528,504—Bolting Reel, E. R. Draver, Alliance, Neb.

528,418—Grain Conveyer, F. E. Duckham, London, England.

528,419—Pneumatic Grain Conveyer, F. E. Duckham, London, England.

528,230—Grain Elevator, F. Kaucher, St. Joseph, Mo.

528,405—Grain Scouring Machine, R. W. Welch, Baltimore, Md.

NEW R. R. OFFICIALS.

General Superintendent Mohler, of the Minneapolis & St. Louis Railroad, has announced his appointments. The heads of departments remain unchanged and are as follows: General Superintendent, T. E. Clarke; chief engineer, William Crooks; auditor, O. C. Post; general freight agent, W. M. Hopkins; assistant general freight agent, R. G. Brown; general ticket and passenger agent, A. B. Cutts; assistant general solicitor, W. F. Booth.

LAKE SUPERIOR MILLS.



Lake Superior Mills,
SUPERIOR, WIS.
6,000 Barrels Daily Capacity.
L. R. HURD, Manager.

DAISY ROLLER MILL CO.,
PROPRIETORS.

Daisy Roller Mills,
MILWAUKEE, WIS.
1,800 Barrels Daily Capacity.
H. E. BROOKS, Manager.

MEETING OF ILLINOIS GRAIN MEN.

The Central Illinois Grain Dealers' Association held a meeting at Decatur on November 2, which was an event of considerable interest. In a report of the meeting the Decatur Herald Dispatch says: The meeting was one for business purely, and it was the expressed wish of the members that farmers might have been present to hear all that was said, for it could then have been made to appear to them that whatever the advantage the grain dealer might secure for the benefit of his own business meant an advance price to the farmers, for the reason that the dealer always buys on the same margin.

The meeting was rather informal and the matters discussed were along the line of the business. The first matter talked of was the shortage complained of at Chicago. It was suggested that as a remedy for this the association should agitate in favor of public warehouses and public weighmen.

The subject of mutual insurance of elevators was also discussed at some length.

It is now known that a majority of the freight cars are largely occupied with hauling hard coal and cotton, and the members of the association were urged to show to the railroads the necessity for getting cars for the early movement of the crop, it having been the common experience that farmers want to move their corn early.

The members were urged to agitate among the railroad men for cars for an early movement of the grain.

Several matters of legislation were discussed, and it was resolved that the association should, at the next meeting of the legislature, lay before that body the grain dealers' grievances. Chief among these is what is known as the Landlord and Tenant Law. This law provides that a landlord may follow grain sold by a tenant to the hands of an innocent purchaser, provided that the rent upon his land has not been paid. The grain dealers insist that it is the business of the landlord to look after his own rents and that when the grain dealer once pays for the grain that is quite enough.

The meeting was attended by 100 members of the association, and at the banquet there were not less than twenty more perhaps, chiefly made up of division freight agents, local agents, line agents, and others of the railroad service. Their presence was thought in the highest degree necessary, for the reason that it is well if the best relations exist between the dealer and the railroads and for the further reason that the necessity of cars for the prompt movement of the big corn crop must be made known to the officials in control.

FIRE.

—Livermore, Cal., Nov. 1. Livermore Flouring Mills destroyed. Insured in Home Mutual, San Francisco, \$5,000; Home of New York, \$600.

—R. D. Wind's grist-mill, Eola, La., burned.

—Siegel's flour mill at Erie, Pa., has been burned.

—J. T. Rushing's flour mill at Keatchie, La., was burned recently.

—J. T. Henderson's flour mill at Villa Rica, Ga., has been burned.

—Jas. R. Massey's flour mill at Lancaster, S. C., was burned recently.

—The 125-barrel flour mill at Ellendale, N. D., was burned October 14.

—W. H. Stuckey's flour mill at Blakely, Ga., was destroyed by fire recently.

—Harvey Drummond's flour and corn mill at Switzer, S. C., was burned recently.

—Ezra R. Early's flour mill at Snyder, Pa., was burned recently. Loss, \$10,000.

—Swan, Moseley & Co., millers at Auxvasse, Mo., have recently suffered a loss from fire.

—W. Johnson's flour and feed mill situated near Chittenango, N. Y., was burned recently.

—Neller's flour mill at Eagle Lake, Minn., has been burned. Loss, \$6,000; insurance, \$3,000.

—The Fulton Flour Mill at Fulton, Iowa, was burned October 12. Loss, \$3,000; insurance, \$500.

—The flour mill owned by J. M. and G. F. Stockert at Buckhannon, W. Va., has been burned.

—The flour mill at Hillsburg, Ind., owned by James Mann and operated by J. H. Stewart, was burned recently.

—D. H. Orr's flour mill at Cascade, Minn., was burned on the night of October 1. Loss, \$25,000; insurance, \$10,000.

The Rex flour mills at Kansas City were burned November 6. Loss \$300,000.

The flour mills at Republic, Mo., owned by R. C. Stone, were destroyed by fire on October 1. The loss is \$60,000, with small insurance.

The flour mill owned by John Otto at Wapello, Iowa, was burned on the night of October 24. A large quantity of grain was also consumed. Loss, \$20,000; insurance, \$10,000.

The flour mill at Lawrence, Wis., owned by C. E. Pierce, was burned on the night of September 27. Incendiarism is the supposed origin of the fire. Loss, \$12,000; insurance, \$4,000.

PURIFIER SPEED.

It must be remembered that the material handled by the purifiers is of a very delicate nature, or a great deal of it is, and none of it will stand the rough handling that wheat or any other kind of whole grain will. While the air currents are all regulated by valves, still the speed of the machine should not be too high, because then even with the use of the valves it is difficult to control the air current sufficiently to prevent the fan from pulling out more or less of the fine stock, which, while it may be saved by the use of dust catchers and other devices, is to an extent wasted, because it will then have to be worked into cheaper grades of flour. Undoubtedly also the contracting of the air currents to neutralize the effects of high speed, the efficiency of the machine is somewhat impaired.—*Trade-man.*

PURELY BUSINESS.

The Prinz & Rau Manufacturing Company of Milwaukee, Wis., has engaged M. Bowe, recently city salesman for the Willford & Northway Manufacturing Company, to represent the company throughout the Northwest, with headquarters at Minneapolis. J. H. Walsh, formerly Southwestern representative for the Cockle Separator Manufacturing Company, has been appointed general agent for the Southwest.

The Witte Iron Works Company of Kansas City writes us: "Trade appears to be again on the boom if selling two or three engines to custom millers is a fair indication. Our only complaint is that the public seems afraid of gas and gasoline engines wearing out. Whoever gets a Witte soon thinks differently, as every piece is a duplicate and we are done changing."

The Weber Gas and Gasoline Engine Company of Kansas City, Mo., was given the highest award and diploma by the Finney County Irrigation and Agricultural Society at Garden City, Kas., for the most economical and simplest engine for irrigation purposes. The Weber Company is justly proud of this honor, as there were quite a number of exhibits at the fair.

The Todd & Stanley Mill Furnishing Company had an extensive exhibit of its various manufactures at the recent St. Louis exposition. The exhibit consisted of corn, wheat, rye, barley and oats mills, Todd's Cornmeal Bolt, internal roller mill.

The Automatic Grain Separator Company of Lockport, Ill., have certified to a dissolution of organization.

The J. B. Alfrey Manufacturing Company are preparing to place two rolls of large size on the market. They will be 10x30 and 10x36 inches.

The Willford & Northway Manufacturing Company write us: "Business is very fair with us. Millers seem inclined to wait until the last minute before giving an order."

The New Era Scalper and Grader Company of St. Louis, Mo., has been organized to manufacture the New Era Scalper, which was formerly manufactured by the Superlative Purifier Manufacturing Company of Milwaukee, Wis.

The Boston Belting Company of Boston has issued a very neat catalogue and price list of its manufactures of fire hose, etc. The book is well illustrated and contains many points of information and general interest.

Todds & Stanley Mill Furnishing Company of St. Louis have a special notice that will interest their customers. They have settled in full with the Knickerbocker Company in satisfaction of all claims of infringement of the latter's dust collector patents by millers who purchased dust collectors of Todds & Stanley Mill Furnishing Company. This action will be appreciated by the many customers and friends of this sterling company.

The Lunkenheimer Company of Cincinnati, New York and London, have reached the height of the printer's art in their catalogue for 1895. It is one

of the most excellent publications of the kind ever sent out to the trade.

"This circular is not intended for your wastebasket," says American Automatic Aerating Machine Company, at the top of their new circular. The description of the machine is concise and clear. John D. Baugert, president of the company, signs the circular.

PERSONALS.

John F. Dougherty will operate the mill just completed at Carrington, S. D.

Ed. Gunderson will run the 75-barrel mill for Thos. Connor, Barnesville, Minn.

J. H. Walsh, formerly with the Milwaukee Mill Furnishing Company, takes the road for the Prinz and Rau Manufacturing Company.

W. S. Hendry, formerly with the City Mills at Chillicothe, Mo., takes charge of the La Plata (Mo.) mill as head miller.

Theo. Ponsar, of Red Cloud, Neb., will take a position as second under Head Miller C. F. Whitney at the Inter-Ocean mills.

Chas. H. Netherton, formerly with the Republic Milling Company, of Republic, Mo., has accepted a position with the Pfeffer Milling Company, of Lebanon, Ill.

E. J. Donahue, head miller for Mansiton Milling Company, Manston, Wis., has resigned and will locate at Los Angeles, Cal. I. B. Swetland, formerly second miller, takes his place.

Frank M. Smith has been appointed manager of the southwestern headquarters of Aug. Wolf & Co. at Kansas City, Mo.

James R. Young has entered upon his duties as southwestern representative of the E. P. Allis Company and the Harmon Manufacturing Company, with headquarters at 29 and 30 Armour building, Kansas City, Mo. "Jim" is thoroughly familiar with the ins and outs of the milling and mill building business and has the reputation of being a hustler. J. D. Edge, formerly with Wilford & Northway Manufacturing Company, has been employed by Mr. Young as his assistant.

NEW GRAIN ELEVATORS.

Miner, Ill., is to have a new elevator. Smolan, Kan.—Chas. Shogren will build an elevator.

Gifford, Ill.—Carrington & Hannah will build a 100,000 bushel elevator.

Leavenworth, Kan.—Owen Duffy is preparing to build.

Gardner, Kan.—J. B. Ward contemplates rebuilding his elevator.

La Crosse, Wis.—The Listman Milling Company will erect a 150,000-bushel elevator.

Glenwood, Ia.—B. K. Windham will rebuild. Harry Fair has charge of the work.

Waco, Tex.—Philadelphia capitalists contemplate erecting a pecan elevator at Waco.

Toledo, O.—The National Milling Co. elevator will be enlarged to 600,000 bushels capacity.

Buffalo, N. Y.—The Erie Canal Boatman's Elevator Co. will construct two sooting elevators.

Nevada, Mo.—Davis & Co. will erect

an elevator on the site now occupied by the old one.

Chattanooga, Tenn.—The Mountain City Mill Co. is contemplating to build a 150,000-bushel elevator.

Buffalo, N. Y.—Frank A. Dole is to construct an elevator at junction of the Erie tracks and Elk Street.

Clinton, Mo.—A new elevator will be built.

Morris, Ill.—Chas. Peterson will erect an elevator.

Bonville, Ill.—Goodman & Muilliken will build an elevator.

COMPARATIVE WHEAT RECEIPTS.

Receipts of wheat at winter and spring grain markets for eighteen weeks, from July 1 to November 3, with comparisons, in bushels, compiled by the Cincinnati Price Current:

	1894.	1893.	1892.
St. Louis	7,521,000	2,056,000	19,000,000
Toledo	11,130,000	8,329,000	18,402,000
Detroit	2,595,000	6,085,000	4,732,000
Kansas City	5,076,000	7,442,000	15,654,000
Cincinnati	503,000	558,000	1,209,000

Win. wheat 26,825,000 30,569,000 58,997,000

Chicago 18,531,000 11,319,000 34,083,000

Milwaukee 2,719,000 5,046,000 5,893,000

Minneapolis 23,832,000 20,396,000 23,671,000

Duluth 16,755,000 17,181,000 19,052,000

Sp. wheat 61,827,000 53,942,000 88,711,000

Aggregate, 18 weeks 88,062,000 84,511,000 142,706,000

Winter, past week 563,000 1,496,000 2,035,000

Spring, past week 4,014,000 5,224,000 6,084,000

Total, week 4,577,000 6,090,000 8,719,000

Previous w/k 5,004,000 6,384,000 8,914,000

[Note.—Receipts at Chicago are more or less winter wheat largely so a portion of the season.]

The following statement shows by states the area, yield per acre, and product of the corn crop of 1894 in bushels:

States.	Acres.	Acres.	Product.
New York	550,940	240,000	15,978,000
Pennsylvania	1,331,387	27,1	31,501,000
Texas	3,022,014	20,5	80,401,000
Tennessee	3,583,243	26,0	93,194,000
Kentucky	3,037,348	22,0	68,555,000
Ohio	3,010,034	23,5	70,736,000
Michigan	1,060,133	22,6	23,959,000
Indiana	3,798,257	27,1	102,933,000
Illinois	6,844,084	27,2	180,152,000
Wisconsin	1,107,328	20,5	21,000,000
Minnesota	1,107,528	17,5	19,382,000
Iowa	5,798,436	15,0	92,194,000
Missouri	6,225,233	25,5	141,593,000
Nebraska	5,271,004	13,4	70,713,000
South Dakota	4,835,848	9,4	43,746,000
	891,119	7,6	6,773,000
Total	52,197,980	1,081,487,000	
Unenumerated	21,306,423	19,5	415,456,000
Grand total	73,503,403	20,4	1,496,943,000
Ten principal states	45,940,538	20,7	851,106,000

In answer to an inquiry as to whether the tendency to feed wheat was being maintained, the following answers were received (the figures representing counties and not the number of returns received):

States.	"Yes."	"No."	"More."
New York	30	6	5
Pennsylvania	40	6	0
Tennessee	19	0	5
Kentucky	35	17	6
Ohio	70	15	17
Michigan	65	14	11
Indiana	65	10	10
Illinois	65	10	10
Wisconsin	40	8	8
Minnesota	58	12	0
Iowa	60	14	10
Missouri	80	12	11
Kansas	68	9	13
Nebraska	60	9	10
California	20	6	8
Oregon	18	8	0
Washington	16	0	6
North Dakota	32	0	7
South Dakota	42	5	10
Total	945	175	156

Fall Plowing.—In Texas, Tennessee, Kentucky, Ohio, Indiana, Illinois and Kansas continued dry weather is seriously interfering with fall work.

COMMERCE OF THE PORT OF TACOMA.

The report of harbor master of the port of Tacoma for the month of October shows: Exports—615,537 bushels wheat (foreign) \$251,800; 304,000 bushels wheat (coastwise), \$120,000; 35,979 barrels flour, \$72,153; 2,304,300 pounds canned salmon, \$212,335; 5,027,640 feet lumber, \$61,691; 21,000 tons coal, \$65,700. Total, \$783,679. Inward registered tonnage, 59,530 tons; outward registered tonnage, 42,378 tons; inward cargo, 6,789 tons; outward cargo, 64,370 tons.

ACROSS THE SEA.

In the northern and middle parts of China, three grades of flour are produced from the grain by a very primitive process of milling. The "shon mien" is the first sifting; the "nee mien" is the second grade; and the "no D" is the last grade. Bread made from this latter grade somewhat resembles rough gingerbread. This is usually the food of the poorest families, who buy it for about 10d per bushel. The bread of the Chinese is usually fermented and then steamed. Only a small quantity is baked in the oven. The staple articles of food are corn, millet and sweet potatoes. Rice is the entire breadstuff in the South provinces.—Exchange.

The wheat shipments from the United States and Canada for the thirteen weeks since August 1 compare as follows with the two previous years, with the figures for Russia, India, Argentina and Australasia added:

	1894.	1893.	1892.
To U. K.	3,600,000	4,320,000	5,110,000
Continent	1,062,000	2,235,000	1,600,000
Total U. S.	4,652,000	6,555,000	6,710,000
Russia	3,620,000	3,031,000	2,784,000
India	423,000	600,000	587,000
Australasia	140,000	100,000	60,000
Argentina	1,000,000	450,000	220,000
Total	9,835,000	10,833,000	10,361,000
London Millers' Gazette.			

R. W. Dunham's Milling and Market News, under date of Nov. 7th, gives the following in regard to the outlook in England: The return of rainy weather came too soon for a great number of our farmers, and we have seen in the past week an exceptional rainfall well in excess of the normal for the whole of the month of October, although after all there had been such a deficiency until now; but the balance of moisture will soon be restored with the weather that we have lately experienced. During the past week plowing has been out of the question on the stiff clays, and even on the light lands the plow could only occasionally be put to work. Drilling was out of the question on account of the condition of the soil and the unseasonable weather which has been both unhealthy to man and beast. Under these conditions, whatever may be the areas of wheat sown, the seed until recently has been put in this autumn under most favorable conditions, and the result is that we now see that a good start has been made, and in most districts some of the crop is already showing well above ground. There is some comfort for farmers in the fact that there are indications of more settled weather being experienced in the near future, so that the interruption of sowing at the present

moment is not of any consequence, as wheat can be put in at any time during the present month, when the dryer atmosphere will make the land work more fairly. Many farmers, too, have already sown as much wheat as they intend at the present moment, so that they are not over anxious if they finish or not what they decided to do.

Two years ago, qrs....	4,028,000	2,276,000
	4,028,000	2,088,000
Last year qrs....	4,184,000	2,765,000
	4,184,000	6,394,000
Last week qrs....	3,026,000	5,065,000
	3,026,000	5,047,000
At present qrs....	2,077,000	5,161,000
	2,077,000	5,252,000
Total foreign....	5,112,000	10,317,000
British wheat undelivered....	5,161,000	11,986,000
Total British and foreign....	10,273,000	12,114,000
Visible supply in America....	3,774,000	8,486,000
Grand total....	20,047,000	19,897,000
Stocks of foreign wheat and flour in U. K. ports, for U. K. 3,085,000	3,085,000	3,085,000
Total foreign....	2,077,000	2,077,000
British wheat undelivered....	5,161,000	5,161,000
Total British and foreign....	10,273,000	10,273,000
Visible supply in America....	3,774,000	3,774,000
Grand total....	20,047,000	20,047,000

French flour in London has been lately again making itself felt, a fair business being done for November-December delivery at 16s3d to 16s6d per 280 lbs for the mark AA of the Corbell mills. In October the United Kingdom imported 33,500 sacks from France, against 27,500 sacks in September, the total for the ten months ended October 31 is thus 334,750 sacks, against 18,107 sacks last year in the corresponding period.—London Millers' Gazette.

THE STORAGE OF GRAIN.

The practice of storing grain in pits, lined, perhaps, with masonry or pottery, can be traced back to very remote antiquity. In cold and temperate climates the problem of storage is more difficult. In some countries a system of large metallic reservoirs in special buildings are employed, which are charged from above and emptied from below. From studying the phenomena that occur in the storage of grain, both by observation of large stores and laboratory experiments, it has been found that grain placed in air absorbs oxygen and gives out carbonic acid; and even when air is excluded grain still liberates carbonic acid through intracellular fermentation. The carbonic acid formed, in any case, measures the alteration and loss; and comparing the influence of renewal of air with that of confined air it has been noticed that in the former case the grain liberated about ten times more carbonic acid than in the latter. In contact with air the carbonic acid formed is always inferior in volume to the oxygen absorbed. There is a secondary and incomplete combustion like that in germinating of oleaginous seeds. The oxygen is chiefly fixed by fatty matter. As to moisture, grain usually contains 11 to 19 per cent. of water. Very dry grain gives little carbonic acid; in consequence it is exposed to ravages of

insects which do not then meet with an asphyxiating atmosphere. The proportion of carbonic acid increases very quickly with the degree of moisture, and beyond 13 to 14 per cent. of moisture the progression is enormous. The proportion also increases very rapidly with temperature till about 50 degrees. Here there is a stoppage, but on heating further the combustion acquires fresh energy. Two phenomena of combustion can be distinguished—one of physiological order, corresponding to respiration, the other purely chemical. It is said that anaesthetics, such as sulphide of carbon, diminish, without stopping, the formation of carbonic acid.—R. W. Dunham's Milling and Market News, London.

IN THE SOUTHWEST.

Trans-Missouri traffic is practically at an end and will continue so until a new crop is harvested. Railroads, instead of transporting grain to Eastern markets, are hauling it into Nebraska, Kansas and other markets in Western states on account of the short crop. There are about seven counties in Nebraska without visible supply of wheat or, for that matter, any other grain tributary to the Burlington, Union Pacific and Rock Island, and these counties are located in the eastern and southern portion of the state, in a belt where the average wheat rate is 26 cents per 100 pounds, or 15 6-10 cents a bushel.

The actual Chicago value in the above territory, allowing nothing for the middlemen, is 38 cents a bushel, and during the entire fall wheat has been worth from 53 to 55 cents a bushel to Central Nebraska mills, where it escapes classification, weighing and other charges incident to Chicago delivery. At the mills it has only to be subjected to a lenient freight rate of 6 cents a bushel. This wheat has been worth 47 to 49 cents to the producer or shipper on track, or 10 cents more than if shipped to Chicago. Wheat, therefore, if not shipped to mills or used locally is held for future delivery. This same condition obtains with corn and oats. But the demand is not alone confined to Nebraska and Kansas; there is also a large territory tributary to the Rocky Mountains where there is a demand for cereals, especially corn and oats.

WHEAT AND FLOUR EXPORTED.

Week, Nov. 8.	Flour, bbls.	Wheat, bus.
New York.....	110,136	206,544
Philadelphia.....	18,000	32,355
Baltimore.....	16,141	30,000
Boston.....	36,067	123,428
Newport News.....	10,098	
Norfolk.....		
Halifax.....		
St. John, N. B.....	20,848	150,750
Montreal.....		
Portland, Me.....		
New Orleans.....	6,500	62,000
San Francisco.....	13,066	440,238
Portland, Ore.....		188,753
Tacoma.....		213,255
Totals.....	240,446	1,607,326

The chief of the bureau of statistics reported November 14 that the total value of the exports of domestic breadstuffs from the United States during the month of October, 1894, and during the ten months ended October 31, 1894, were as follows:

Breadstuffs—	1904.	1893.
October.....	\$9,346,596	\$13,011,022
Ten months ending.....		
October 31.....	103,940,691	100,426,016

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MILWAUKEE, NOVEMBER, 1894

We respectfully request our readers, when they write to persons or firms advertising in this paper, to mention that their advertisement was seen in THE UNITED STATES MILLER. You will thereby oblige not only this paper, but the advertisers.

Editorial.

WE INDORSE THE AMERICAN MILLER.

The American Miller, a paper that reflects great credit on every art and industry involved in the publication of it, expressed some opinions in the last issue which are equally creditable. The Miller said:

It would be a splendid thing for the trade if the millers of every district would become better acquainted, work harmoniously together for the advancement of their mutual interests and work together with the millers of other districts for advancing interests common to all.

The American Miller goes on to say that misrepresentation of the acts of millers by buyers to other millers competing for the same trade, and others with whom millers have to deal, have broken down the old fences in many places which kept the millers apart, and sums up what has been done as follows:

A number of meetings of millers have been held during the last few months for the express purpose of getting the millers acquainted, and each meeting has been instrumental in overcoming much of the existing jealousy and distrust. Confidence has been established by acquaintance, millers have taken to communicating one with another, and buyers are no longer able to gain a point by telling extravagant stories about what a competing miller will do.

In Texas, where a good start has been made in the line of organization, the millers were not acquainted with each other and had not worked together to secure fair treatment from the railroads or relief from imposi-

tions and abuses. Through the association they expect to become better acquainted, to be able to maintain better prices and to advance materially the common interests of all.

The Southern millers have held two meetings, the results of which have been exceedingly gratifying and the promoters are particularly encouraged in their work of securing trustful acquaintance among the millers.

Pennsylvania has three associations doing good work, and an effort is now being made by the president of the Cumberland Valley Millers' Protective Association and other millers to have all millers' organizations work under one general plan for the advancement of mutual interests. Local affairs will be looked after by local associations.

Millers of other districts without organizations have held a number of meetings recently, but have not accomplished much beyond getting acquainted.

MEETING OF MILLERS IN CHICAGO NOV. 16.

The initial steps looking toward the curtailment of the flour output by a six weeks' suspension of the merchant millers of the country were taken at a meeting of millers at the Auditorium last Friday. The meeting consisted of twelve men, who were chosen by vote and in whose selection 500 millers, representing a daily output of 350,000 barrels, were invited to take part.

The committee consisted of T. A. Taylor, Toledo; B. C. Church, Duluth; D. R. Sparks, Alton, Ill.; M. H. Davis, Shelby, O.; M. S. Blas, Seymour, Ind.; W. G. Edgar, Minneapolis; J. M. Turner, Grand Forks, N. D.; John W. Haywood, Milwaukee; J. F. Imbs, St. Louis; A. A. Freeman, Cleveland, O.; H. S. Kennedy, Mankato, Minn.; E. E. Perry, Indianapolis.

The committee was unanimous in agreeing that the price of flour was below a profit yielding point, and that some concerted action by the trade was necessary to bring up the prices to a profit point. An arbitrary increase of the price was given little consideration, as the custom mills scattered all over the country could not be brought into line. The reduction of stocks was regarded as the best method of tending to an increase in the price. An agreement was then formed to shut down the mills for a period of six weeks, within three months, beginning December 10. The agreement will be in force when the mills representing a production of 150,000 barrels a day have signed.

* *

Milwaukee millers are not inclined to follow the lead of their rivals, the Minneapolis members of the craft, who are endeavoring to induce them to shut down for six weeks during the coming winter in order to enable Minneapolis to work off her accumulation in eastern and other markets. There is only one Milwaukee mill, the Sanderson, inclined to follow the advice of this city's rival. During the summer freight rates were against the city, but in winter Milwaukee has the advantage.

ST. LOUIS FLOUR MILLS CLOSE.

St. Louis, Mo., Nov. 17.—The majority of the large flouring mills here have either closed for an indefinite period or do so soon. This course is made necessary, the millers claim, because of the congestion of the market, and more especially by the advanced freight to the Eastern seaboard of about 22 cents a barrel. This action of the St. Louis millers is entirely independent of the action of the Northwestern millers held at Chicago yesterday, whereby a shut-down of six weeks during the three months beginning December 10 was decided upon. The action of the St. Louis millers is said to be purely individual, and is taken at this time because their orders are practically filled and there is no chance for further demand or sale. The Standard St. Louis mill, the Goddard mills, and the Regina mills are already closed own; the Plant mills and the Kehlor Brothers' mill will close tonight, and the Victoria mills will close in two or three days.

A barge loaded with 6,500 barrels of flour consigned to Schaff, Birnheimer & Co., St. Louis, sank about 40 miles above Greenville, Miss., Saturday, the 17th inst., and it is likely that the cargo is ruined.

The inquiry for hard wheat continues, and choice milling commands a good premium over red. Advice from the Southwest point to set-back in the growing wheat because of a lack of moisture in the Winter wheat States. Earlier in the season, the weather was all that could be desired, but a rank growth followed, making the plant easily susceptible to injury. It is claimed that mills in Texas are shutting down, not from lack of demand for the product, but from inability to secure supplies.

Reliable wheat-feeding statistics are hard to get.

THE HUNGARIAN FLOUR INDUSTRY.

Consul Edward P. J. Hammond, Budapest, Austria-Hungary, writes as follows to the State Department:

Hungary not only produces wheat enough to cover its own needs, but has a surplus production, enabling it to export wheat largely to neighboring Austria and to Germany and Switzerland, besides supplying its important milling industry, which exports large quantities of wheat flour to Austria, England, Germany and France.

The Hungarian mills fully supply the home market and compete with American wheat flour in some of the foreign markets.

The perfection of all the mechanical contrivances employed by the milling industry in Hungary and its extraordinary development are well known in the United States. But what may be less known is the extraordinary care with which the wheat growers, as well as the mills, co-operate to produce the finest quality of flour by assorting, classifying and thoroughly cleaning the different qualities of wheat grown. They used to produce as many as eighteen grades, but now these are reduced to about seven. The uniformity and reliability of these grades have contributed more than anything else to the success of Hun-

garian flour. It is claimed, besides, that the Hungarian flour is possessed of a buoyancy which makes it better adapted for bakers than any other flour, and this quality is attributed to a nice mixture of different brands of wheat, which is kept secret by the mills.

While there are about fourteen large first-class flouring mills in Budapest, there are about 120 more scattered over the country, for the most part near the centers of wheat-growing districts. The proximity has the advantage of educating the farmer as to the needs of the miller, and at the same time it secures the grower a ready market and cash for his produce.

NEW WHEAT PREPARATION.

A preparation of whole wheat, which contains all its nutritive elements, and promises to be a valuable addition to our national dietary, has been invented by a citizen of Colorado. The best selected wheat is washed in a rocker, similar to that used in placer gold mining, the heavy grain going to the bottom, the chaffy kernels floating on the surface. It is then steamed, a little salt being added during the process, the dry outer bark coming off; the kernels are fed through a hopper into a machine which cuts them longitudinally into long threads; then the shredded wheat is cut into small sections, slightly baked in a quick oven.

With milk or butter this food is very palatable and digestible. It is said to be one of the most attractive and desirable forms in which cereals are presented, as a cheap, healthful and strengthening diet, and has become popular in Colorado cities, and promises an extension of its use throughout the country. The use of rolled and steamed oats has displaced other oatmeal products in many families, perhaps, because of care of preparation and short time required for cooking, and avoidance of the crude flavor from insufficient cooking; and this method has a similar result in bringing out the full flavor and best results in nutrition from this wheat product.—Country Gentleman.

NEW ELEVATOR COMPANY ORGANIZED.

Duluth, Minn., Nov. 17.—The Consolidated Elevator Company, which succeeds the Lake Superior Union Improvement and Northern Pacific Elevator companies, was formally organized and began business here Friday. The directors elected are: M. J. Forbes and George Spencer, Duluth; Clarence H. Clark, Philadelphia; Charles A. Mair, Chicago; Forest H. Packer and George B. Cooksey, New York; George Ripley and Theophilus King, Boston, and E. W. Peel, St. Paul. Mr. Forbes is President, Mr. Cooksey Vice-president and A. F. Hepworth Secretary and Treasurer. The executive committee consists of Chairman Spencer, and Forbes, Parker, Cooksey and Mair.

Russia is doing an unprecedented export business in wheat, and for the first three months of the present season, has shipped 116,000,000 bu. an increase of 20,000,000 bu. over last year, and 36,000,000 bu. over the same time in 1892.

Daily and Monthly Precipitation for October, 1894, Wisconsin Weather Service, Official.

STATIONS.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	Sum.
Amherst	.60	T	.20	T			.30																									2.95
Antigo	.88	.08	.35				.02			.30																					7.62	
Ashland	.56																															1.45
Baraboo	.58																															1.27
Barron	.71	.05	.63	.25			.25																								2.16	
Bayfield																																4.82
Beaver Dam	.73		.04	.15			.15																								2.21	
Beloit	.62		.40	.20			.23																								3.85	
Beloitville	.54																															1.85
Black River Falls	.90		.20	.11	.20																										2.64	
Butternut																																
Cadiz																																
Centralia	.44		.10				T			.00																					2.04	
Chilton	.52		.20	.17			.25																								2.82	
Chippewa Falls	.36	T	.00	.14			.02																								1.77	
City Point																																1.79
Columbus	.40	.20																														1.05
Crandon																																0.80
Dodge																																
De Pere	.44		.02	.18			.17																								2.11	
Dubuque	.52		.00	.16			.21																								4.67	
Duluth	.42		.02	.16			.26																								4.99	
Eau Claire	.18	1.38	.07	.04	.71	.01	.42	T		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	2.86			
Elkhorn																																
Fond du Lac	.59		.07	.32	.07	T																									2.58	
Grantsburg																																
Green Bay																																
Hartford	.36		.35	.22			.22																								3.79	
Harvey	.44	.05	.12	.14			.12																								2.95	
Hazelwood	.68	.05	.37	T			.02																								3.79	
Hilhamborough																																
Janesville	.47		.10				T	.20																							2.17	
Juneau																																
Koepenick	.40	.10	.20	.10			.10																								3.30	
La Crosse	T	.52	.01	.06	T		.05	T		.01																				1.98		
Lancaster																																2.67
Lincoln																																
Madison																																
Manitowoc	.20		T	.06	.02		.27																								2.67	
Meadow Valley																																
Medford	.70		.10	.34																											2.46	
Menomonie																																
Milwaukee	.60	.61																														4.83
Nevilleville																																
New Holstein																																
Oconomowoc	.38		T	.06	.14		.34	T																							2.60	
Oconto	.17	.07																														2.37
Osceola																																
Oshkosh	.27		T	.80																												3.48
Pepin	.80	.06		T	.04	.04																									2.98	
Pine River	.62	.02	.12	.11			.09																								2.50	
Port Washington																																
Prairie du Chien	.70																															3.05
Reedsburg																																2.67
Rhinelander																																
Royalton	.62		.07		.39	.13	.37																								5.33	
Sharon																																
Shawano	.56		.11	.17	.17		.10																								1.68	
Spooner																																
St. Paul	.69		.16	.10			T	.18	T																						5.81	
Stevens Point																																
Tamahawk Lake																																
Valley Junction																																
Viroqua																																
Watertown	.03	.33		.18	.03		.03																								3.43	
Waukesha	.41																															1.61
West Bend	.40		T	.17			.13																								2.37	
Westfield	.68	.00	.00	.00	.00		.10																							3.50		
Weston	T	1.10	.06	.15	.02	.05	.18	.05																						1.68		
Whitehall		T	1.10	.06	.12	.02	.20																							4.22		
																																1.60

REVIEW OF OCTOBER WEATHER
The cool weather which set in towards the end of September continued up to the middle of October. Killing frosts occurred on the

Official Monthly Meteorological Data For October, 1894, Wisconsin Weather Service.

STATION	COUNTY	LOCATION OF STATIONS.	BAROMETER.	TEMPERATURE (Degrees Fahr.)	PRECIPITATION.	WIND.	SKY.	PHENOMENA.	DATE.	NAME OF OBSERVER.	
										NAME OF OBSERVER.	
Albertville	Albertville	Portage.	42 28 59 17 1 200	47.4 56.8 38.0 73 16 23	14 50 18.8 2.95 .37 19	W	7 10 14 11	A. J. Smith.			
Antigo	Antigo	Lansdale.	45 11 69 52 1 615	48.3 57.6 35.0 69 20 21	14 48 16.6 2.65 .26 16	W	16 2 10 10	A. B. Millard.			
Ashland	Ashland	Albion.	46 31 50 54 1 615	48.3 57.6 35.0 69 20 21	14 48 16.6 2.65 .26 16	W	16 2 10 10	B. P. Wheeler.			
Appleton	Appleton	Appleton.	43 29 39 44 1 961	46.5 54.8 36.9 70 16 23	19 31 17.6 3.45 1.67 .26 16	NW	9 7 15 15	G. W. Toolie.			
Barron	Barron	Bartell.	43 31 91 50 1 600	47.4 58.4 36.3 70 22	22 32 17.7 3.45 1.67 .26 16	NW	10 12 6	E. W. Pierce.			
Benton	Benton	Bartell.	46 47 90 50 1 600	47.4 58.4 36.3 70 22	22 32 17.7 3.45 1.67 .26 16	NW	10 12 6	Prof. F. H. Benton.			
Birfield	Birfield	Birfield.	48 27 88 50 1 500	51.8 61.8 42.3 73 16	9 45 19.1 2.21 .73 2	S	7 14 9	J. H. Birfield.			
Bonne Terre	Bonne Terre	Bonnie Terre.	48 27 88 50 1 500	48.0 58.1 38.0 75 16	12 28 19.1 2.21 .73 2	S	9 19 10	Prof. F. H. Birfield.			
Bowling Green	Bowling Green	Bowling Green.	42 39 89 51 1 500	48.0 58.1 38.0 75 16	12 28 19.1 2.21 .73 2	S	9 19 10	Prof. F. H. Birfield.			
Brule	Brule	Brule.	42 39 89 51 1 500	48.0 58.1 38.0 75 16	12 28 19.1 2.21 .73 2	S	9 19 10	Prof. F. H. Birfield.			
Black River Falls	Black River Falls	Black River Falls.	42 39 89 51 1 500	48.0 58.1 38.0 75 16	12 28 19.1 2.21 .73 2	S	9 19 10	Prof. F. H. Birfield.			
Butternut	Butternut	Butternut.	46 2 90 30 1 1000	47.6 60.3 34.9 73 17	18 34 14 45 17.7 1.68 .15 25	S	8 17 8	J. H. Birfield.			
Centralia	Centralia	Centralia.	44 24 89 51 1 926	48.6 59.3 47.8 74 15	19 11 38 21.5 2.04 .70 .26 21	S	8 17 8	J. H. Birfield.			
Chilton	Chilton	Chilton.	44 24 89 51 1 926	48.6 59.3 47.8 74 15	19 11 38 21.5 2.04 .70 .26 21	S	8 17 8	J. H. Birfield.			
Chippewa Falls	Chippewa Falls	Chippewa Falls.	44 19 89 30 1 936	50.0 61.8 38.6 75 16	12 28 19.1 2.21 .73 2	S	9 19 10	Prof. F. H. Birfield.			
Columbus	Columbus	Columbus.	48 18 69 7 1 936	48.8 61.9 32.2 74 14	14 60 29 1.94 .52 21	S	8 17 8	Prof. F. H. Birfield.			
Craton	Craton	Craton.	49 5 86 58 1 1000	49.2 54.6 40.2 69 16	22 32 14 44 14.4 3.94 .26 29	S	8 17 8	Prof. F. H. Birfield.			
Crown Point	Crown Point	Crown Point.	42 38 89 59 1 926	49.1 58.5 39.1 74 16	22 32 14 44 1.8 2.11 .45 21	S	8 17 8	Prof. F. H. Birfield.			
Darwin	Darwin	Darwin.	44 26 88 58 1 926	49.1 57.5 39.1 73 16	22 32 14 44 1.6 2.01 .40 21	S	8 17 8	Prof. F. H. Birfield.			
Denton	Denton	Denton.	42 26 90 44 1 651	49.1 57.5 39.1 73 16	22 32 14 44 1.6 2.01 .40 21	S	8 17 8	Prof. F. H. Birfield.			
Douglas	Douglas	Douglas.	46 48 92 87 1 670	29.8 30.28 29.25 2	46.9 52.4 41.3 72 16	S	8 18 13	J. H. Birfield.			
Dunn	Dunn	Dunn.	46 48 92 87 1 670	49.1 60.1 38.4 75 17	23 33 21.9 1.94 .38 .26 25	S	9 18 12	J. H. Birfield.			
Elkhorn	Elkhorn	Elkhorn.	44 48 91 30 1 800	43.9 53.5 35.3 76 16	17 28 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Fond du Lac	Fond du Lac	Fond du Lac.	48 41 88 18 1 934	48.6 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Grantsburg	Grantsburg	Grantsburg.	48 41 88 18 1 934	48.6 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Green Bay	Green Bay	Green Bay.	44 31 88 4 1 1000	47.0 51.2 44.5 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Hartford	Hartford	Hartford.	29.9 30.36 24 29.18 5 1 1000	47.0 51.2 44.5 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Harvey	Harvey	Harvey.	48 41 88 26 1 937	48.6 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Hayward	Hayward	Hayward.	46 45 90 30 1 937	48.6 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Hillsboro	Hillsboro	Hillsboro.	42 41 89 31 1 937	48.6 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Janesville	Janesville	Janesville.	43 28 88 48 1 941	47.6 56.5 36.2 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Jordan	Jordan	Jordan.	45 28 89 11 1 941	49.0 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Kenosha	Kenosha	Kenosha.	45 28 89 11 1 941	49.0 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
Lakefield	Lakefield	Lakefield.	45 28 89 11 1 941	49.0 57.6 36.7 76 16	23 33 17.6 2.58 .75 29	S	9 18 12	J. H. Birfield.			
La Crosse	La Crosse	La Crosse.	45 49 50 45 1 970	47.4 54.6 40.5 76 16	22 32 14 44 1.9 2.11 .45 21	S	8 17 8	J. H. Birfield.			
Grant	Grant	Grant.	45 49 50 45 1 970	47.4 54.6 40.5 76 16	22 32 14 44 1.9 2.11 .45 21	S	8 17 8	J. H. Birfield.			
Lincoln	Lincoln	Lincoln.	45 49 50 45 1 970	47.4 54.6 40.5 76 16	22 32 14 44 1.9 2.11 .45 21	S	8 17 8	J. H. Birfield.			
Madison	Madison	Madison.	45 5 89 25 1 935	50.4 57.5 36.8 73 16	31 31 14 44 1.77 .59 2	S	9 16 10	J. H. Birfield.			
Mantowoc	Mantowoc	Mantowoc.	44 57 45 45 1 935	47.2 54.1 35.0 73 16	29 30 14 45 1.97 .59 2	S	9 16 10	J. H. Birfield.			
Meadow Valley	Meadow Valley	Meadow Valley.	44 57 45 45 1 935	44.5 59.9 32.9 75 16	30 31 14 45 1.97 .59 2	S	9 16 10	J. H. Birfield.			
Medford	Medford	Medford.	45 10 90 20 1 920	46.5 57.7 35.2 75 17	19 16 11 14 39 2.14 .65 20	S	9 16 10	J. H. Birfield.			
Menomonie	Menomonie	Menomonie.	44 51 91 55 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Milwaukee	Milwaukee	Milwaukee.	45 28 89 11 1 935	49.0 58.6 40.5 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Minocqua	Minocqua	Minocqua.	44 39 57 5 1 935	49.0 58.6 36.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Clark	Clark	Clark.	44 39 57 5 1 935	49.0 58.6 36.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
New Holstein	New Holstein	New Holstein.	44 39 57 5 1 935	49.0 58.6 36.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Oconomowoc	Oconomowoc	Oconomowoc.	44 39 57 5 1 935	49.0 58.6 36.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Oconto	Oconto	Oconto.	44 47 87 45 1 935	46.5 58.3 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Oconto Mills	Oconto Mills	Oconto Mills.	44 47 87 45 1 935	46.5 58.3 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Poplar River	Poplar River	Poplar River.	44 47 87 45 1 935	46.5 58.3 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Portage	Portage	Portage.	44 32 89 29 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Prairie du Chien	Prairie du Chien	Prairie du Chien.	44 32 89 29 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Rhinelander	Rhinelander	Rhinelander.	43 31 90 0 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Shawano	Shawano	Shawano.	44 47 87 45 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
St. Paul (Minn.)	St. Paul (Minn.)	St. Paul (Minn.)	44 47 87 45 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Valley Lake	Valley Lake	Valley Lake.	44 47 87 45 1 935	47.6 56.0 35.7 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Menomonie	Menomonie	Menomonie.	44 50 22 91 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Waukesha	Waukesha	Waukesha.	44 51 90 56 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Washington	Washington	Washington.	44 51 90 56 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
West Bend	West Bend	West Bend.	44 47 87 45 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Weston	Weston	Weston.	44 47 87 45 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Dunn	Dunn	Dunn.	44 47 87 45 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Tempesta	Tempesta	Tempesta.	44 47 87 45 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Whitehall	Whitehall	Whitehall.	44 47 87 45 1 935	48.2 58.6 38.3 76 16	23 33 17.6 2.58 .75 29	S	9 16 10	J. H. Birfield.			
Average					29.88						

NOTE.—Light frosts are reported until a killing frost occurs, and killing frost is reported until the minimum temperature has fallen to 32 degrees. †Report for 27 days. **Report for 30 days only.

*Also 13. †Also 18.

†Report last 20 days.

**Report for 30 days only.

††Report for 30 days.

NOVEMBER CROP REPORT.

(Government Report.)

Corn—The November returns to the Department of Agriculture of the rates of yield per acre make the average of corn 19.7, which is about $1\frac{1}{2}$ bushels above the yield indicated by the condition figures in October. This is the lowest rate of yield that has occurred since 1881, when it stood at 18.6 bushels per acre. Last year the yield was 22.5 bushels upon a much larger harvested acreage. The rates for the years 1886, 1887, and 1890—which were years of comparatively low yield—were, respectively, 22, 20.1, and 20.7 bushels. The yield for the present year, which must be regarded as a preliminary and not a final estimate, is less than the average for the ten years, 1870 to 1879, by 7.4 bushels; less than the average for the succeeding decade, 1880 to 1889, by 4.4 bushels, and less than the average for the four years, 1890 to 1893, by 3.7 bushels. The result is in harmony with reported indications during the growing season.

The rates of yield of the principal corn States are as follows: New York, 28.2; Pennsylvania, 32; Ohio, 26.3; Michigan, 23.2; Indiana, 28.9; Illinois, 28.8; Iowa, 15; Missouri, 22; Kansas, 11.2; Nebraska, 6.

Potatoes—The average yield of potatoes is returned as 62.3 bushels. This is a slightly greater yield than for the year 1892, but 10 bushels less than for last year. The average yield for a recent 10-year period was 76.2. The present return is in accord with the conditions through the season and indicates a short crop. The product will be much less than that of 1893, notwithstanding the increased area shown in the preliminary acreage returns of July last.

The crops of New England, the South Atlantic, Gulf, Mountain, and Pacific States are above the average in quantity, but in other sections of the country, including the most important in commercial production, the crop is so far below an average as to result in the present low figure of yield per acre.

The quality of the crop is fair, the percentage being 84.

Sweet Potatoes—The average yield per acre of sweet potatoes is 92.4 bushels. This indicates a better crop than that of 1893.

Hay—The yield of hay for 1894, as averaged for the whole country, is 1.15 tons to the acre. This is not as high as the yield of 1893, which was 1.32 tons per acre.

Iowa, Missouri, Kansas, Nebraska, and South Dakota depart further from their ten-year averages than any other State. The large yields reported from the Mountain and Pacific States are due to the culture of alfalfa in those States, which generally under irrigation yields more heavily than the cultivated grasses of other sections.

The quality is high, as shown by the percentage of 94.5.

Buckwheat—The average yield of this crop for the entire country is 16.1 bushels per acre, against 14.7 in 1893, 14.1 in 1892, and 15.8 in 1891. The yields in New York and Pennsylvania, which comprise nearly two-thirds of the total area under buckwheat,

are 15.5 and 18 bushels, respectively. In Michigan and Wisconsin, which comprise about one-eighth of the total area, the yields are, respectively, 12 and 8.5 bushels. If we except Oregon, which has but an insignificant acreage, the highest yield per acre (37.8 bushels) is in Maine, while the lowest (3.7 bushels) is in Nebraska.

The general average for quality is 90.3, the averages in the four States of largest production being 94 in New York and Pennsylvania, 82 in Michigan, and 76 in Wisconsin.

Tobacco—The average yield per acre for the entire country is 733 pounds, against 695.3 pounds in 1893, 682 pounds in 1892, and 748 pounds in 1891.

Of the States of large area growing the heavier tobaccos, Kentucky yields 739, North Carolina 554, Virginia 586, Tennessee 680, and Ohio 677 pounds per acre. The highest yields are, as usual, found in districts that grow seed leaf tobacco, Pennsylvania yielding 1,387, Massachusetts 1,485, and Connecticut 1,516 pounds per acre.

The general average for quality is 87.9, 100 being the standard. The range is from 68 in Illinois to 103 in Massachusetts, the latter, however, being the only State in which quality is rated above 97.

Sorghum—The yield of sorghum per acre range from 17 gallons in Nebraska to 158 gallons in Louisiana. The yields in the South are in general considerably higher than a year ago and only one Western State east of the Mississippi River shows a decrease, this one being Wisconsin. West of the Mississippi there is a decrease in Minnesota, Iowa, Kansas, Nebraska and Utah; Minnesota and Nebraska being the heaviest losers. The small yields in the Northwest are mainly due to drought.

Rice—Owing to the incomplete returns on rice, the report of yield per acre will be postponed until next month.

Sugar Cane—The indicated product of sugar cane is considerably larger than last year in each of the Gulf States except Florida, the increase ranging from 7 per cent. in Louisiana to 10 per cent. in Texas. There is also an increase of 1 per cent. in Georgia and 4 per cent. in Arkansas. In Florida, where heavy storms have damaged the crop, there is a decrease of 9 per cent.

Cotton—The cotton returns of the Department of Agriculture for the month of November show improvement of the prospects as compared with the returns of last month. This is due to better weather, and is especially noticeable in the States of Alabama, Mississippi, Louisiana and Texas. The favorable weather, besides improving the crop, has greatly facilitated picking. In Alabama the crop has been nearly all secured and much of it sold. In Mississippi many counties report picking as closed, and considerable improvement in the crop over the indications of October. The average estimate for the State of Louisiana is reported as raised because of the favorable weather for picking during October. The crop in Texas maintains the high average formerly indicated. The weather has been quite favorable for picking, and nearly

three-fourths of the crop has been gathered. A greater dispatch has been noted in harvesting the crop than in any former year, and it has also been marketed in large quantities. The injuries to the crop in some parts of the State from excessive moisture, causing rust and rotting of bolls, have been more than counterbalanced by the favorable conditions that existed in other parts for maturing the top crop, and for picking. No great damage from frost reported. In Arkansas the weather has also been favorable for gathering. The increased product of that State, as compared with last year, is due to the fact that much land that was overflowed in 1893 was planted to cotton this year.

The indicated average yield per acre for the entire cotton belt is 191.7 pounds, distributed by States as follows: North Carolina, 210; South Carolina, 168; Georgia, 155; Florida, 110; Alabama, 160; Mississippi, 195; Louisiana, 230; Texas, 285; Arkansas, 203; Tennessee, 167; all other States and Territories, 200.

GROWING WHEAT CROPS.

Summarized from Broomhall's Corn Trade News, 31st October, 1894.

Argentina—Recent rumors of damage by hail storms must have been quite local as our agent fails to refer them. The previous good prospects may be deemed to stand good.

Australia—Harvest is due to commence in South Australia in a few days, and the new crop should commence moving pretty freely at the end of November. In the early districts of Victoria harvesting may be expected to commence late in November.

France—Winter seedings are most promising; the late weather has been most favorable for the finishing of seeding operations.

Germany—Winter seedings show a good plant. The latest official report is above average.

Russia—The latest reports on the whole are quite favorable.

Roumania—Autumn work in arrear. Wheat area curtailed. Agricultural outlook dismal.

Turkey (Smyrna)—Further abundant rains have caused agriculturists much satisfaction. Autumn seedling is now progressing steadily.

Hungary—The young plants have made a good start.

Austria—Late damp weather was favorable for the seedlings.

Spain—In some districts there are complaints of want of rain, but on the whole the crop is going on very fairly.

Italy—Rains have continued, and wheat plant is progressing favorably.

CANALS TO CLOSE NOVEMBER 30.

Albany, N. Y., Nov. 10.—Superintendent Hannan, of the State Department of Public Works, has ordered that the Erie, Champlain, Black River, Oswego and Cayuga and Seneca canals be closed for the season on Friday, November 30, at midnight unless sooner closed by ice.

This paper will soon largely increase its force of correspondents in all sections of the world.

GRAIN TRADE AND CROPS.

Extant of Wheat Feeding to Cattle. In its weekly review of crop correspondence, the Cincinnati Price-Current says: "It was remarked by us last week that an inquiry concerning the extent of wheat feeding operations in the West had been instituted, and that returns were not then complete, but were sufficient to justify an approximation. The conclusion reached was that about 40,000,000 bushels of wheat had already been absorbed, and that about 75,000,000 bushels would likely be thus disposed of during the season in the principal states where wheat is being fed. In the light of the full information before us, from our regular correspondents, we regard 40,000,000 bushels as a fair indication of the quantity which has already been fed in the states having special significance. It may be reasonable to recognize about 10,000,000 bushels as having been similarly disposed of in the various other states where something of feeding wheat to animals is done."

"The quantity of wheat likely to be fed the remainder of the season is more a matter of conjecture and uncertainty. The prevailing belief, as indicated by the average of replies, is that nearly as much wheat will be fed hereafter as has been thus disposed of on this crop."

"The interior marketing of wheat for shipment continues very sparingly, with no indication of especial enlargement in the near future. Stocks of flour in the West are being reduced, the total being largely below corresponding time last year. Although the temperature has been lower the past week than previously this season, thus facilitating the drying process in corn, there is not much improvement yet apparent in this particular. The offerings of corn for shipment are moderately increased. Influences calculated to aid the wheat markets toward better values have been gaining more of recognition and confidence is increasing."

WEST SUPERIOR'S FLOUR PRODUCTION.

West Superior, Wis., Nov. 16.—Last week the local mills broke their records by manufacturing 103,334 barrels of flour. This exceeds the best previous grind by more than 5,000 barrels, and is an average of 17,224 barrels daily, compared with 95,577 barrels in the week previous; 88,069 a year ago and 36,825 barrels two years ago.

E. S. Noel, proprietor of Noel's mill at Estill Springs, Tenn., has removed his office to Chattanooga, and has rented one of the store rooms in the Southern Express Company's building for the purpose. The Noel mill is the largest winter wheat flour mill in the world, and the removal of its business headquarters to Chattanooga will prove quite an acquisition to local commercial circles.

The grain elevator of the Vernon Mill and Elevator Company was burned recently at Vernon. Loss, \$40,000; small insurance.

OCTOBER WEATHER.

Washington, D. C., Nov. 1, 1894.—Temperature: October, 1894, was cooler than usual on the north Pacific coast, in portions of the East Gulf States, and over a limited area in the interior of Central California. No marked deficiency in temperature occurred in any of the districts named, the maximum deficiency of from 3 to 4 degrees occurring on the North Pacific coast. While there was a slight deficiency in portions of the East Gulf States, it may be stated that the temperature conditions of the month were practically normal in the districts east of the Mississippi and south of the Ohio River, including the Atlantic coast states south of Maryland.

Throughout the Rocky Mountain slope, plateau regions, and over the northern districts from the Missouri Valley eastward to the Atlantic coast the month was warmer than usual, the temperature excess averaging from 3 to 4 degrees per day from central Texas northward over Kansas, Nebraska, and portions of Colorado and Wyoming, and from the upper Lake region eastward to the New England coast.

Some very high October temperatures occurred in California, Montana, Colorado, and Texas during the first half of the month, a number of stations reporting the highest yet recorded in this month. At San Francisco the temperature reached 90 degrees on the 4th, which is 3 degrees higher than the previous October maximum, and at San Antonio, Tex., the maximum 98 degrees on the 10th was 7 degrees above the former highest October maximum.

The minimum temperatures of the month reached the freezing point throughout the Rocky Mountain districts, in the upper Missouri and upper Mississippi valleys, upper Lake region, and in portions of the upper Ohio valley and lower Lake region, those occurring on the 15th in the Lake regions and Ohio Valley being unusually low. Unusually low October temperatures also occurred in the central Mississippi Valley on the 9th and 14th.

Killing frosts have occurred as far south as eastern Tennessee, but on the Atlantic coast, south of Virginia, and throughout the greater part of the Mississippi Valley southward of St. Louis, no killing frosts were reported during October.

Precipitation: The rainfall during October was heavier than usual along the west Florida coast and over the interior portions of the South Atlantic States. There was also more than the average October rainfall from the lower Lakes eastward to the southern New England and middle Atlantic coast, from northern Wisconsin westward to Montana, and on the Pacific coast north of San Francisco. In southern New England, over the interior portions of the Carolinas, northern Minnesota, and on the extreme north Pacific coast the monthly rainfall exceeded the October average by more than 2 inches, and at some stations from 4 to 6 inches more than the usual amount were reported.

On the immediate south Atlantic coast, throughout the central valleys and west Gulf States, and thence westward over the Rocky Mountain and plateau regions to the south Pacific coast, the monthly rainfall was below the average, the deficiency amounting to 2 inches, or more, on the south Atlantic coast and in the central Mississippi valley and from 2 to 4 inches in the west Gulf States. On the southern California coast, where the average October rainfall generally ranges from one-half to three-fourths of an inch, practically no rain fell during the month.

The absence of heavy or continuous rains over the western half of the cotton region during October was, doubtless, very favorable for securing cotton, while it is probable that the excessive rains over portions of the eastern half of the cotton region have been unfavorable.

Upon the whole, the weather conditions during October were generally favorable for farm work, especially for fall plowing and gathering corn.

MARK W. HARRINGTON,
Chief of Bureau.

BROKERS ARE HELD LIABLE.

New York, Nov. 17.—Special Telegram to Chicago Inter Ocean.—In an action brought by Emory M. Vantassel against H. B. Beecher and others, which went to trial before Judge Gildersleeve and a jury in the Superior Court, the plaintiff sought to charge the defendants, who are insurance brokers, for an amount of insurance which he says they failed to procure on his employment to renew policies about to expire in January, 1891, to the amount of \$30,000 on a feed mill in this city, owned by him. The mill was burned Jan. 14, 1891, and the plaintiff aimed to hold the defendants liable as insurers for the same amount that the insurance companies would have been liable for had they issued the policies. The defendants admitted the employment, but say they used every reasonable effort to procure the insurance. At the time of the fire the mill was uninsured. A verdict has been rendered against the brokers for \$20,000 and interest. The insurance brokers in this city are much worried by the verdict.

ARGENTINA WHEAT CROP ESTIMATES ASTRAY.

The wheat crop of this Republic for 1893 was officially estimated at 88,000,000 bushels. The exports to Europe up to October 31 were 53,000,000 bushels, to which add exports for remainder of the year, and exports to Brazil, etc., 58,000,000 English papers 7th inst., estimate quantity carried over into 1894, 4,000,000 And quantity fed to cattle in 1893, in place of maize, which crop was nearly a total failure, 8,000,000 65,000,000

Left for seed and bread in 1893 20,000,000 The population of Argentina is given as 4,700,000, and 4 1/3 bushels per capita is considered a low estimate for consumption. Equal 20,366,000 This leaves nothing for seed, which would require at least, 10,000,000 If the assumption as to wheat fed in place of maize, and as to wheat carried over be correct, the wheat crop of Argentina in 1893 must have been nearly 100,000,000 bushels.—New York Produce Exchange Reporter.

NEWS NOTES.

Grover Hill, Ohio, wants a flour mill. Lamb & Prewitt, will erect a large flouring mill at Milldale.

A flouring mill will be erected at Winchester by R. P. Schobe.

The Somerset Milling Company will build a flouring mill at Somerset.

E. W. C. Edwards will build and operate a forty barrel flouring mill at Caskey.

P. S. Whitenberg contemplates erecting a flouring mill at Crawford. He will also rebuild his cotton gin.

J. O. Baber and J. Hoffman have erected a grist mill at Gallatin.

A \$15,000 grain elevator will be erected at Mobile. W. H. McIntosh is interested.

J. H. Poston will establish a grist mill at Enfield.

Wm. Garner and others will build and operate a \$10,000 flouring mill at Quitman.

Albert Jones will build and operate a flouring mill at Angleton, Tex.

Smith & Huber will build a forty-barrel roller flouring mill at Guthrie, Ky.

J. T. Price and W. Vilar will build and operate a flouring mill at Jack's Mill, Va.

A roller process flouring mill will be erected at Harrodsburg, Ky., by Gibson & Pinkston.

Exports of wheat and flour from the United States in October were equal to 15,546,458 bu., against 15,556,484 bu. for the same time last year.

Max Segelbaum, formerly a dry goods merchant of Minneapolis, has bought a half interest in the Smith mill at Le Sueur, Minn.

The Phoenix mill at Minneapolis, will probably shut down at once to put in a dust collector and exhaust for the rolls. It is likely to remain idle for two weeks.

The Lincoln mill at Anoka, Minn., which has been closed down for some time pending extensive repairs on the dam at that place, started at full tilt yesterday and will run full blast at least until the close of navigation.

The Merchants' mill, of Mitchell, S. Dak., has been awarded the contract to furnish 250,000 pounds of flour to Indians at Crow Creek and Lower Brule agencies.

The assignment is reported of the American Cooperage Company, of Friar's Point, Miss. It is stated also that arrangements will be made to resume business at an early day. The com-

pany is said to be indebted to residents of Friar's Point about \$23,000.

Flour barrel stock to the amount of 45 cars was reported unloaded by Minneapolis shippers last week. Of this 24 cars were elm staves, 2 oak staves, 11 heading, 4 hickory hoops, 3 patent hoops, and 1 half-barrel stock.

The insurance involved in the Kehler flouring mill loss last week are as follows: On elevator building, \$18,000; on grain in elevator, \$50,000; on mill under general form, covering building, machinery, boiler, engines and stock, \$82,750; on stock in mill (specific), \$6,500.

Mark Lane Express, October 29.—A large consignment of compressed fodder is said to have been ordered by the British government from the United States. This article consists of crushed oats, corn, and chopped hay, and specimens of it were shown at the Chicago World's Fair. It is hoped by the Americans that this may possibly open up a large trade in this commodity.

Henry Keney, the sole surviving partner of Keney Bros., extensive wholesale dealers in flour for over half a century, died of heart disease November 15th, at Hartford, Conn. He leaves a fortune of over \$1,000,000. He was interested in Hartford banking and insurance corporations. He was a bachelor and leaves no near relatives.

One well known grain man on 'Change, who expects to see wheat go lower than ever next spring, says that it is futile to load Europe up with American flour and then try to sell them our wheat. He quotes a Glasgow miller as saying that the markets of Scotland are overflowing with flour from this side. Argentine, he thinks, will undersell our wheat next year and take the foreign markets away from us. But, of course, there is another side to the question, and the bulls figure out that wheat feeding is going to be a great leveler of supplies in this country. Besides, the low prices ruling will make farmers put their lands to more profitable use.

The latest mail advices from abroad note a satisfactory situation from an agricultural point of view in the late sowings in France and such as were then still in operation. Belgium reported the weather as favorable for the prosecution of sowing, with the prospects very fair for the young plant. The seedlings are reported good in Germany, although there has been

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too much moisture which has been complained of in several provinces. The sowings were being pushed vigorously in Roumania, with the weather fine and mild and prospects good. Throughout Italy the seed was already germinated and the plants developing well in all the fields. In South Russia the condition of the young cereals was described as particularly good, although in some places there was too much rain and in others the persistence of drought was somewhat complained of. Bountiful rains were reported in Turkey through the interior, with farmers engaged in autumn sowings. In South Australia the latest Melbourne advices represented the crop prospects as very good, with reasonable rains throughout the colony, and that the wheat plant is growing well and continuing healthy. In Argentine there was some complaint by the farmers about the want of rain, particularly in the Santa Fe colonies. There were some intimations that the reports of the large increase of area sown to wheat for the present crop was over-estimated.

A foreign house received a cable here today saying that owing to excessive rains the Argentine crop of wheat will be only about as large as last year.

Mr. Benjamin Logan says that there is considerable wheat in England that is so damaged that it is being used for feed at about half price of good wheat, or 10s per quarter, and low grade Russian at 3s9d per cental; also, that there is little California there, and will not be before February. His correspondents in the United Kingdom also say France and Germany have much damp wheat unfit for milling.

A London letter says: Considerable speculative buying has been induced by Mulhall's estimate of the Argentine crop, which, for an "average" he places at 7,100,000 qrs., and as it is now conceded by Beerbohm that the crop is "somewhat under an average on an acreage 10 per cent. greater than last year," it is easy to see that should this estimate prove any way near correct it will alter the whole phase of the market, as it relieves it of at least 7,000,000 qrs. (early estimates having put the crop at 14,500,000 qrs.)

It is reported by some very conservative non-speculative houses in the export trade that a considerable percentage of the wheat crops of England, France and a part of Germany has been so damaged by mould, following a wet harvest, that it will be absolutely unfit for anything but feeding, and that when the old wheat they have in stock is used up those countries will be practically dependent upon America, as the Argentine wheat will not do for mixing even, and the new crop will not be available until a good time after European stocks of old are exhausted. This is said to be the basis of the late strength in English markets.

Capt. V. E. McBee has been appointed general superintendent of transportation of the Sea Board Air Line Railroad system, with headquarters in Atlanta. Capt. McBee was formerly superintendent of the Richmond & Danville line in North and South Carolina, but resigned that position soon after the reorganization of those lines into the Southern Railway system.

Lexington, Ky.—The outlook for the milling business is dull, for general business it is good. Milling will continue to be dull until the present surplus is used up, and hogs and cattle will soon make way with it. We are to have a local manufacturers' exhibit here in December that will last three weeks. It is for Lexington and Fayette County. We want to show our town and the surrounding country what we are doing.

Orange, Tex.—Norsworthy & Wooster have sold about one-third of their rice crop to the Galveston flour mills. They will have 2,500 bags to market later, but will hold for better prices. The Magnolia farm has a little more than half of the crop threshed and housed, while at other plantations less has been sacked, yet the dry, crisp weather is so favorable that none will be lost in the field, as was the case on one or two farms in this county last year. The samples of this year's crop that have been gathered and threshed are superior in grade to last season's crop. Nearly all of the rice that was sown here last spring was choice imported Honduras seed, a variety very much more hardy, heavier and of a clearer white than the Creole grain of Louisiana or South Carolina. No finer table rice is grown anywhere. It takes a higher polish and does not crack and break to pieces in the process of preparing it for market as badly as the Rangoon goods. It furnishes a much prettier sample than the Chinese or Hawaiian article and superior to either for the table.

FOREIGN NOTES.

Beerbohm's Adelaide correspondent, September 24th, says that the grain trade "is fearfully dull and farmers are in despair at the low price of wheat, which was quoted at only 1s8d per bushel at many of the buying centers. The new crop only promises a moderate yield. In South Australia not more than 5 to 6 bushels per acre seems likely, against 8 bushels last year."

With regard to wheat shipments from Argentine, India and Australia, they remain very small. A semi-official report to Beerbohm from Buenos Ayres estimates says "the new crop at 2,000,000 French tons, or 9,000,000 quarters, which would be about equal to last year's crop, but it is unwise to place much reliance in these early estimates."

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RAILROAD NOTES.

It is reported that the Canadian Pacific are arranging to effect an entrance into Buffalo.

The Pennsylvania Railroad will direct as much freight as possible to and from Chicago over the Pan-Hamilton Road, thus clearing the tracks of the Fort Wayne road for passenger traffic. It is the desire of the company to make their passenger service between Pittsburgh and Chicago the best, and the new Winter schedule will contain a big reduction in the running time between these points.

The Rock Island Road will re-establish the low excess baggage rates. The agreement of the Western Passenger Association to raise excess bag-

gage rates, which went into effect November 1, has been the subject of vigorous protests from the traveling men. It is thought the new agreement made the rate too high and several members of the Association failed to keep faith in the matter. Hence the course of the Rock Island.

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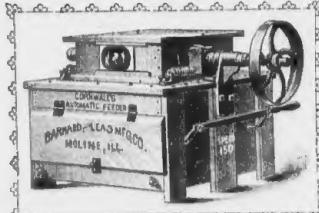
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